

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference <b>703487PCT</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. <b>PCT/CA2005/000289</b>	International filing date ( <i>day/month/year</i> ) 28 February 2005 (28-02-2005)	Priority date ( <i>day/month/year</i> ) 04 March 2004 (04-03-2004)	
International Patent Classification (IPC) or national classification and IPC IPC(7): E05F 11/48, E05F 15/16			
Applicant <b>INTIER AUTOMOTIVE CLOSURES INC. ET AL</b>			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.  3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of <u>3</u> sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. 1 and the Supplemental Box. b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s)) ,containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).  4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I      Basis of the report <input type="checkbox"/> Box No. II     Priority <input type="checkbox"/> Box No. III    Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV     Lack of unity of invention <input checked="" type="checkbox"/> Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI     Certain documents cited <input checked="" type="checkbox"/> Box No. VII    Certain defects in the international application <input type="checkbox"/> Box No. VIII   Certain observations on the international application			
Date of submission of the demand 28 June 2005 (28-06-2005)		Date of completion of this report 18 November 2005 (18-11-2005)	
Name and mailing address of the IPEA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001(819)953-2476		Authorized officer  Hoan Huynh (819) 934-3467	

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ the international application as originally filed/furnished
- ☒ the description:
- ☒ pages 1-6 as originally filed/furnished
- ☐ pages\* received by this Authority on \_\_\_\_\_
- ☐ pages\* received by this Authority on \_\_\_\_\_
- ☒ the claims:
- ☐ pages as originally filed/furnished
- ☐ pages\* as amended (together with any statement) under Article 19
- ☒ pages\* 7, 8, 8a (Claims 1-12) received by this Authority on 03 October 2005 (03-10-2005)
- ☐ pages\* received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- ☒ pages 1-3 as originally filed/furnished
- ☐ pages\* received by this Authority on \_\_\_\_\_
- ☐ pages\* received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	<u>1-12</u>	YES
	Claims	<u>NONE</u>	NO
Inventive step (IS)	Claims	<u>1-12</u>	YES
	Claims	<u>NONE</u>	NO
Industrial applicability (IA)	Claims	<u>1-12</u>	YES
	Claims	<u>NONE</u>	NO

**2. Citations and explanations (Rule 70.7)**

Reference is made to the following documents:

D1: US6256929 (Serrano et al.) 10 July 2001

D1 discloses a window regulator having a rail member, a cable, and a motor. The motor drives the cable along the rail to move a window pane engaged on the cable. The rail has a mounting on which a motor casing which houses the motor can be adjusted to a selected position and then securely fixed to the mounting. The motor that operates the cable is also fixed to the casing. The selectability of the mounting position allows the drive motor to be moved for tensioning of the rail cable.

**Novelty (N)**

Claims 1-12 appear to comply with **PCT Article 33(2)** because the prior art does not teach a window regulator characterized by a rail having a guide located at one end and a drive means located at the opposite end whereby the drive means are pivotally mounted to the rail to allow the drive means to be moved away from the opposite guide to tension a drive cable.

**Inventive Step (IS)**

Claims 1-12 appear to meet the criteria set out in **PCT Article 33(3)**. The claims are considered to involved an inventive step, having regard to the closest prior art D1 at the relevant date. D1 teaches of a centrally-located motor housing which is pivotally mounted to a window regulator rail assembly to allow tensioning of the drive cable. It would not have been obvious for a person skilled in the art to relocate the pivotal-mounted drive means of D1 to one end of the rail as per current invention.

**Industrial Applicability (IA)**

The subject matter of claims 1-12 is considered to be industrial applicable and thus fulfills the requirement of **PCT Article 33(4)**.

**Box No. VII**      **Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

1. The abstract does not comply with PCT Rule 8.1(d). Each technical feature mentioned in the abstract and illustrated by a drawing in the international application should be followed by a reference sign, placed between parenthesis.

We claim:

1. A window regulator comprising:  
at least one lift plate to which a window can be affixed; at least one rail along which said at least one lift plate can be moved, the rail including a guide located adjacent one end and a drive means located adjacent the opposite end, the drive means including a driven drum driven by said drive means;  
and a flexible drive member extending about said driven drum and said guide and connected to said lift plate such that movement of said driven drum moves said lift plate along the at least one rail via said flexible drive member and wherein said drive means and said driven drum are pivotally mounted to said rail to allow said driven drum to be moved away from said guide to tension said flexible drive member.
2. The window regulator of claim 1 wherein said flexible drive member is a belt.
3. The window regulator of claim 1 wherein said flexibly drive means is a wire cable.
4. The window regulator of claim 1 wherein said guide is a pulley.
5. The window regulator of claim 1 including first and second rails, each rail having a lift plate to which a respective one of opposed sides of a window can be attached, the first rail including said guide adjacent one end and said drive means and driven drum adjacent said opposite end and the second rail including a guide adjacent each respective end and wherein the flexible drive member extends about a first portion of the driven pulley and the guide of the first rail and a second flexible drive member extends around a second portion of the driven drum and each guide of the second rail such that movement of said driven drum moves each lift plate in the same direction along each respective rail.
6. The window regulator of claim 5 wherein at least one of said guides is a pulley.

7. The window regulator of claim 5 wherein the flexible drive member passes through first and second conduits extending between said first and second rails.
8. The window regulator of claim 5 wherein said driven drum also includes a guide portion.
9. The window regulator of claim 1 including complementary toothed surfaces on said rail and said drive means, said complementary toothed surfaces inter-engaging to maintain said drive means in a desired position wherein said flexible drive member is tensioned to a selected degree.
10. In a window regulator having a drive means including a driven drum engaging a flexible drive member that is connected to a lift plate, wherein the flexible drive member is routed about a guide mounted to one end of a rail, an improvement comprising pivotally mounting the drive means to an opposite end of the rail.
11. A window regulator comprising:
  - at least one rail;
  - a flexible drive member;
  - at least one lift plate connected to the flexible drive member;
  - at least one guide mounted to the at least one rail for routing the flexible drive member; and
  - drive means including a driven drum engaging the flexible drive member, wherein the drive means is pivotally mounted to the at least one rail to allow the driven drum to be moved in relation to the at least one guide in order to tension the flexible drive member.
12. A window regulator comprising:
  - at least one lift plate to which a window can be affixed;
  - at least one rail along which said at least one lift plate can be moved, the rail including a guide located adjacent one end and a drive means located adjacent the opposite end, the drive means including a driven drum driven by said drive means;
  - and a flexible drive member in the form of an endless loop of preselected

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length, the drive member extending about said driven drum and said guide and connected to said lift plate such that movement of said driven drum moves said lift plate along the at least one rail via said flexible drive member and wherein said drive means and said driven drum are pivotally mounted to said rail to allow said driven drum to be moved away from said guide to tension said flexible drive member.

**AMENDED SHEET**